RINGKASAN

MOHAMMAD NUR ICHWAN. Penelitian berjudul Kombinasi Ekstrak Herbal terhadap Jumlah Trombosit dan Fibrinogen Darah Kelinci yang Terinfeksi Koksidiosis. Penelitian dilaksanakan mulai tanggal 16 November 2018 sampai dengan 31 Januari 2019 di Laboratorium Kesehatan Ternak dan Experimental *Farm* Fakultas Peternakan Universitas Jenderal Soedirman, Laboratorium Riset Universitas Jenderal Soedirman dan Laboratorium Kesehatan Hewan Tipe B Purwokerto. Tujuan Penelitian ini adalah mengetahui pengaruh kombinasi ekstrak herbal terhadap trombosit dan fibrinogen darah kelinci dan mengetahui dosis paling optimal ekstrak herbal yang mampu mempengaruhi trombosit dan fibrinogen darah kelinci yang terinfeksi koksidiosis.

Materi yang digunakan pada penelitian adalah 36 ekor kelinci peranakan *Rex* jantan umur lepas sapih ± 3 bulan dengan bobot ±600-700 gram. Bahan yang digunakan adalah darah kelinci, *ethylene diamine tetraacetid acid* (EDTA), feses kelinci, kombinasi ekstrak herbal (bawang putih, batang pisang dan biji pepaya), etanol 96%, obat-obatan, air minum, pakan berupa pellet dan hijauan berupa rumput lapang. Alat yang digunakan dalam penelitian ini adalah kandang kelinci, timbangan, *nipple*, *autoclaf* suhu 121°C tekanan 1,5 atm, oven suhu 50°C, saringan, mortir, corong, pengaduk, beker glass ukuran 100 ml, *magnetic stirer*, mikroskop, *double object glass*, *cover glass*, refraktometer, *rotary evaporator*, cawan porselin ukuran 125 ml, watherbath suhu 60-80°C, gelas ukur, *centrifuge*, *microhematocrit*, *citroceal*, *spuit injection*, *alumunium foil*, kertas saring, pinset, termos es dan plastik. Metode penelitian yang digunakan adalah metode eksperimental dengan Rancangan Acak Lengkap (RAL) menggunakan 6 perlakuan dan 5 ulangan dan dianalisis dengan analisis variansi. Perlakuan terdiri atas D_0: sebagai kontrol (tanpa pemberian ekstrak herbal), D_1: kelinci dengan pemberian 20 mg kombinasi ekstrak herbal, D_2: kelinci dengan pemberian 40 mg kombinasi ekstrak herbal, D_3: kelinci dengan pemberian 60 mg kombinasi ekstrak herbal, D_4: kelinci dengan pemberian 80 mg kombinasi ekstrak herbal dan D_5: kelinci dengan pemberian 100 mg kombinasi ekstrak herbal. Peubah yang diamati adalah trombosit dan fibrinogen darah kelinci yang terinfeksi koksidiosis.

Hasil penelitian menunjukkan bahwa rataan jumlah trombosit darah kelinci D_0, D_1, D_2, D_3, D_4, dan D_5 masing-masing adalah 561.0 ± 420.0 $x10^3$/ µl; 449.2 ± 287.0 $x10^3$/ µl; 447.0 ± 187.0 $x10^3$/ µl; 585.4 ± 153.8 $x10^3$/ µl; 341.0 ± 191.1 $x10^3$/ µl; dan 426.0 ± 171.5 $x10^3$/ µl. Rataan jumlah fibrinogen darah kelinci D_0, D_1, D_2, D_3, D_4 dan D_5 masing-masing adalah 0.24 ± 0.08 g/dL; 0.44 ± 0.27 g/dL; 0.30 ± 0.20 g/dL; 0.36 ± 0.20 g/dL; 0.24 ± 0.08 g/dL dan 0.22 ± 0.10 g/dL. Analisis Variansi menunjukkan bahwa pemberian ekstrak herbal tidak berpengaruh nyata ($P>0,05$) terhadap jumlah trombosit dan fibrinogen darah kelinci yang terinfeksi koksidiosis. Kesimpulan penelitian adalah Pemberian kombinasi ekstrak herbal berpengaruh tidak nyata terhadap peningkatan jumlah trombosit dan fibrinogen darah kelinci yang terinfeksi koksidiosis.

Kata kunci : Ekstrak herbal, koksidiosis, trombosit, fibrinogen, kelinci.

SUMMARY

MOHAMMAD NUR ICHWAN. The research was entitled "Combination of Herbal Extracts on Platelet Amount and Fibrinogen of Rabbit Blood Infected with Coccidiosis". The research was conducted starting on 16th November 2018 until 31th January 2019 at Animal Health Laboratory Jenderal Soedirman University, Experimental Farm Jenderal Soedirman University, Riset Laboratory Jenderal Soedirman University and Animal Health Laboratory type B Purwokerto.The purpose of this research was to determine the effect of the combination of herbal extracts on platelet and fibrinogen in rabbit blood infected with coccidiosis and to know the most optimum usage of the concentration of herbal extract on platelet and fibrinogen in blood of rabbits infected coccidiosis.

The material used in the research was 36 male rabbit *Rex* breeds aged less than 3 months with a weight of ±600-700 grams. The ingredients used were rabbit blood, *ethylene diamine tetraacetid acid* (EDTA), rabbit feces, a combination of herbal extracts (garlic, banana stems and papaya seeds), 96% ethanol, medicines, mineral water, pellet and forage in the form of grass roomy. The tools used in the research were rabbit cages, scales, nipples, autoclaf temperature 121°C 1.5 atm pressure, 50°C oven, filter, mortar, funnel, stirrer, 100 ml glass size alarm, magnetic stirrer, microscope, double object glass, glass cover, refractometer, rotary evaporator, porcelain cup 125 ml size, watherbath temperature 60-80°C, measuring cup, centrifuge, microhematocrit, citroceal, injection syringe, aluminum foil, filter paper, tweezers, ice flasks and plastic. The research method used was the experimental method with Completely Randomized Design (CRD) using 6 treatments and 5 replications and analyzed by analysis of variance. Treatment consisted of D_0: as control (without herbal extract), D_1: rabbit by administering 20 mg combination of herbal extract, D_2: rabbit by giving 40 mg combination of herbal extracts, D_3: rabbit with 60 mg combination of herbal extracts, D_4: rabbit by administering 80 mg of a combination of herbal extracts and D_5: rabbits by administering 100 mg combination of herbal extracts. The variables observed were platelet and fibrinogen blood of rabbits infected with coccidiosis.

The results showed that the average blood platelet count of rabbits D_2, D_3, D_4, D_5, D_6 and D_7 respectively 449.2 ± 287.0 $x10^3$/ µl; 447.0 ± 187.0 $x10^3$/ µl; 585.4 ± 153.8 $x10^3$/ µl; 341.0 ± 191.1 $x10^3$/ µl; 426.0 ± 171.5 $x10^3$/ µl and 561.0 ± 420.0 $x10^3$/ µl. The average amount of rabbit blood fibrinogen D_2, D_3, D_4, D_5, D_6 and D_7 each were 0.44 ± 0.27 g/dL; 0.30 ± 0.20 g/dL; 0.36 ± 0.20 g/dL; 0.24 ± 0.08 g/dL; 0.22 ± 0.10 g/dL dan 0.24 ± 0.08 g/dL. Variance analysis showed that the administration of herbal extracts had no significant effect (P> 0.05) on the number of platelet and fibrinogen in rabbit blood infected with coccidiosis. The conclusion of the research was herbal extracts can increase the number of platelets and fibrinogen blood of rabbits infected with coccidiosis even though the increase was not in line with the increase in the dose of herbal extract given.

Keys words : Herbal extracts, coccidiosis, platelet, fibrinogen, rabbits